USS Oklahoma City CL91 / CLG5 / CG5
The Structure of the Ship

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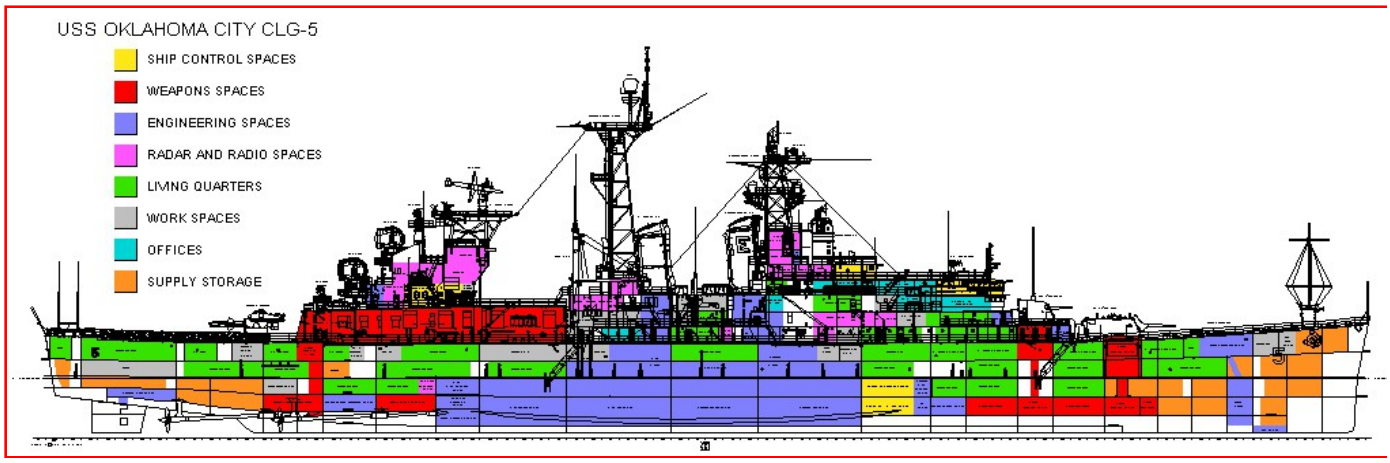
This picture shows the major parts of the USS *Oklahoma City* CLG-5. The drawing depicts the 1972 configuration, but space designations were taken from the original blueprints drawn in 1959. Some minor changes may have occurred over the years. Click on the picture for a more detailed image.



The main components of the ship were organized in a more or less bottom up fashion. The lowest spaces were the voids, bilges, fuel and water tanks. These ran most of the length of the triple bottom structure of the ship. Above these were the second and first platform decks, the third deck, second deck and then the main deck. Above the main deck were the O1 through O7 levels of the superstructure.

Amidships was the propulsion plant including the forward boiler room, forward engine room, after boiler room and after engine room. These were large spaces the full width of the ship with machinery positioned on the lowest platform deck and extending up to the third deck. Above the boilers the uptakes led to the two smoke pipes (funnels). The four propeller shafts ran aft from the engine rooms through shaft alleys to the stern. Outboard of the engineering spaces and magazines below the water line were five inch thick armor belts.

The Combat Information Center (CIC) was located just ahead of the forward boiler room on the first platform. At the lowest levels forward were the projectile and powder magazines for the guns. The ammunition transfer systems, handling rooms and barbette for the six inch turret and five inch mount were positioned directly above the magazines. The chain locker was in the bow with the anchor windlass room above it. In the stern was the steering gear room and the rudder. The missile warhead magazine and missile computer room were located between the shaft alleys aft. Additional auxiliary equipment spaces were located on the platform decks. The remaining space on the first and second platform decks was filled with store rooms and equipment rooms.

The third and second decks were where most of the crew's berthing and living spaces were located, squeezed around the engineering and other equipment spaces. The ship's medical and dental offices were located forward on the third deck. The mess decks were aft on the second deck. The officer's Wardroom was just forward of amidships on the second deck with officer's quarters forward.

On the main deck forward was the anchor gear and six inch turret. Aft was the helicopter landing pad and the Talos missile launcher. The forward and midships superstructure and the missile house filled the space between.

The forward superstructure contained quarters for the Admiral, Seventh Fleet Chief of Staff, the ship's Captain and Executive Officer, all on the main deck. Most of the space up to the O3 level was filled with staff quarters, flag offices, the main communications center and radio rooms. The five inch gun mount was located forward on the O1 level, with the handling room directly below on the main deck. On the O2 level forward were the War Room and the flag bridge. Above these on the O3 level were the navigation bridge, pilot house and the Captain's sea cabin. The O4 level was mostly open deck where the lookouts, weather satellite antenna, searchlights and flag bags were located. The compartments on the O4 and O5 levels were radio and radar rooms. Above these were the Mk37 gunfire director and the forward radar tower. A wide O6 level compartment contained electronics countermeasures (ECM) equipment, with ECM antenna support structures outboard. The forward tower supported the SPS-10 surface search radar antenna, the SPS-43 air search radar antenna, and 48 additional communications and ECM antennas. Many of these were located on the "cloverleaf" platform at about the O9 level.

The midships superstructure was squeezed between and around the uptakes and smoke pipes. It contained ship's offices, workshops, radio rooms and Warrant Officers berthing and living spaces. Boat decks were located outboard to port and starboard, and the motor whaleboat was located on the starboard side amidships. Boat winches were located on the main deck, and the burtoning and topping winches were on the O3 level between the king posts. The king posts carried long booms that were used to move the boats in and out of the water. The tall midships radar tower rose from the O3 level. It carried communications antennas and the TACAN antenna.

The missile house was located on the main deck aft of the midships deck house. This was a large structure built of 1 1/2 inch armor plate that was divided into three major areas. Forward was the Area 3 missile stowage magazine. In the middle was the Area 2 ready service magazine where ready for flight missiles were stowed. Aft of that was the Area 1 wing and fin assembly and launch system control area. Outboard of Area 1 were missile test areas and test equipment rooms. The launcher system transferred missiles from the ready service magazine to the missile launcher.

The top of the missile house at the O2 level was mostly open deck, with the missile transfer FAST crane and strikedown hatches above the Area 3 magazine. At the aft end above the missile test areas were warhead strikedown hatches and warhead cranes. The after superstructure rose above the missile house. Weapons Control was located on the O2 level forward, and the rest of the structure was filed with radar rooms. Two huge SPG-49 target tracking radars were positioned on the after part of the superstructure, with two smaller SPW-2 missile guidance antennas located fore and aft of these. The short after radar tower rose above the O5 level. It carried the SPW-30 air search and height finder radar and a collection of communications antennas.

The CAD model pages contain detailed images of many parts of the ship and quite a bit of explanatory information.

Page Links

- The Ship's crew The crews of the USS *Oklahoma City* and the Seventh Fleet staff.
- Ship's history History of the USS *Oklahoma City*.
- Life on the OK City What it was like to serve on the *Okie Boat*.
- Photos Pictures of the ship and crew 1969-1972.

Miscellaneous

Where do you get relative bearing grease and what is it used for?

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